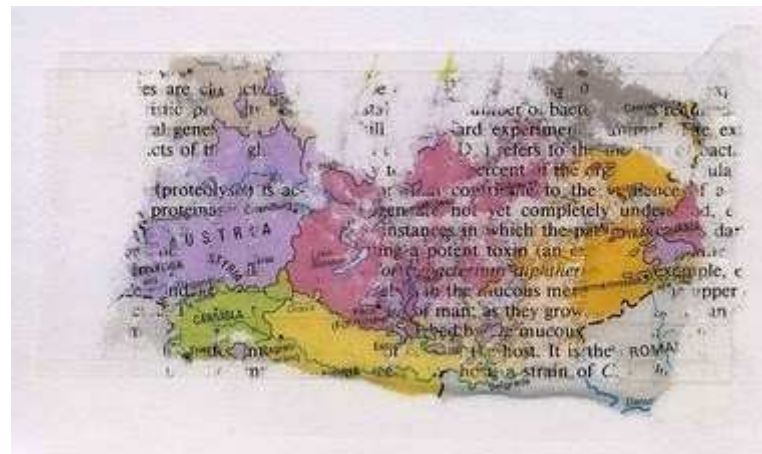


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 with the exception of horses.
 numbers during the middle

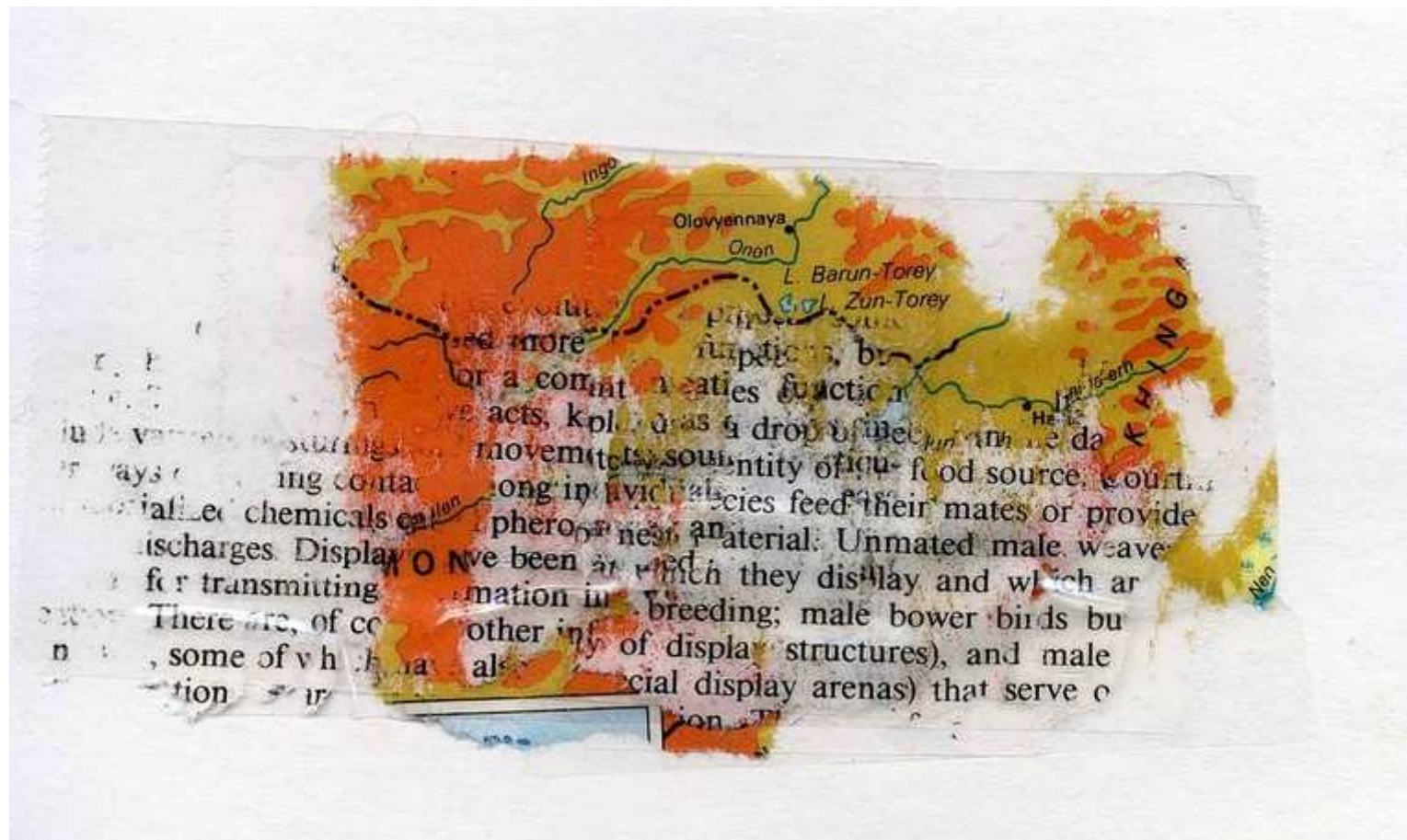
a's vast national forests
 try, and untreated lumber
 the nation's exports. Most
 of small holdings; timber
 is government-owned.
 and trade form the most
 come. Iron and steel pro-
 duction, for example,
 the first three decades



In 1946 the Austrian parliament national-
 ized the Austrian industry, which, at that
 time, was under Soviet control as alleged former
 property. After the State Treaty of 1955 estab-
 lished neutrality and brought the end of Soviet
 occupation, Austria became a sovereign state.
 The nationalization of the three big
 companies, the Alpine Industries, the
 iron and steel industry, and machine-
 building, led to a reorganization and a
 reduction of the number of nat-
 ional enterprises. By the first quarter of the
 century the output of the national-
 ized enterprises is on a par with the



they play the part of a machine, or of a robot, in the sense that they perform certain types of information processing and produce a certain type of output. A prediction of state that is not possible but can be accomplished by a robot can be defined to constitute a strategy, and provided the procedure is described by a well-defined optimization algorithm, an artificially defined robot, or machine, can be said to implement that strategy. The concept of a machine that evolves by means of a random process, that is, that evolves into deterministic and classical processes, is postulated by the theory of evolution to be seen to respond to the environment. A robot can control its environment by understanding, reorienting, and acting in the future, if only in a probabilistic manner, to minimize its prediction error. *Control and Communication in Predictive Mathematical Models of Prediction and Information* spans some years of cybernetics. In 1931 Wiener, an Austrian-born U.S. mathematician, wrote what is now called the Wiener cybernetics that had been subject to a series of starts but later received its own theoretical communication theory and a formalization of control theory in the mid-World War II. Control problems stimulated further research, and Wiener composed a book, *Cybernetics, or Control and Communication*.



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Fats, or lipids, (triglycerides), can be broken down into glycerol and fatty acids. Proteins can be broken down into amino acids. Microorganisms use these products for energy and to build new cells.

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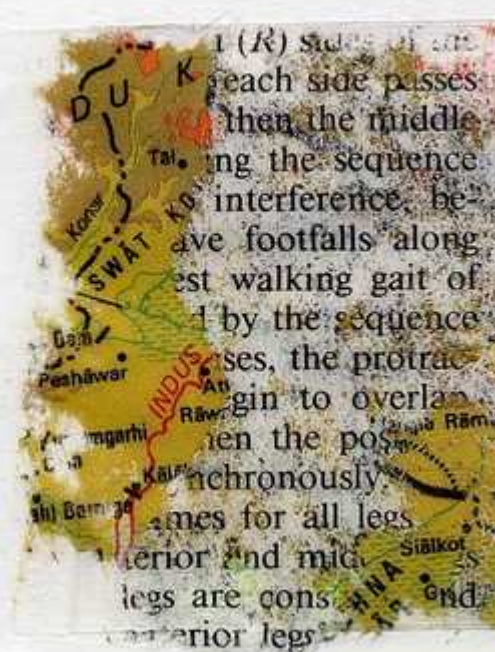
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Female fireflies of the genus *Photurus* lure males of other
genera by imitating flashing codes, then seize and eat
them. A certain species of fly orchids is
modified to resemble the females of various wasp species,
and the odor of the female wasps is also imitated.
When a male is attracted to a model female of the
same species, he attempts to mate with it; the pollen
of the flower is then transferred to the male, which in turn, carries

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steady, slow running. The highest running speed
 the gallop are obtained with symmetrical gal-
 the animal is never supported by more
 legs, occasionally is supported by none. Th
 runners, such as cheetahs or greyhounds, have
 tional contact phase following hindfoot con-
 In cursorial birds and lizards, both of which a-
 the feet are enlarged to increase support and th
 is held perpendicular to the ground so that the
 gravity falls between the feet. This is the fi-
 zone. The running gait is a simple
 of left and right legs. In lizards, however, the
 must begin with the forelimbs. The four-footed
 As the speed increases, the four-footed gait grad-
 sufficient.



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 sufficient.

various... animals... among mammals... systems exist... on that a... commercial... termy is... id warm-blooded... uring... although... s to force the... mammals, two... ickbill platypus... ipials, including... native cat...
... however, such as... temperatures... seasonal temperature variations are also... animals, certain birds exhibit... Although some are capable of main... stable body temperature, others have a... temperature. A torpid poorwill (*Phalaena*... an example of a bird that demonstrates... and true hibernation. Its core... is relatively constant; it can... influence of... regul...





individuals' finding each other sexually, but not always. THE THEORY OF: Special individuals have to find out that they are both at their sensory receptional stimuli is usually only (proper human) however this is not is, in which the accomplished of their evolutionary partners in reproduction. Such mechanisms external factors

... or pheromones communication. well as other behaviour in ins of all other stimuli, many types of behaviour can be induced simply by an injection of appropriate gonadal hormones. Conversely, removal of gonads usually inhibits sexual behaviour and the hormonal control of behaviour has been the subject of much dispute. There is evidence that productive behaviour are or can be controlled by neural mechanisms bypassing the hormonal. Any effect that it may have on the nervous system to produce behaviour is a type of reproduction.

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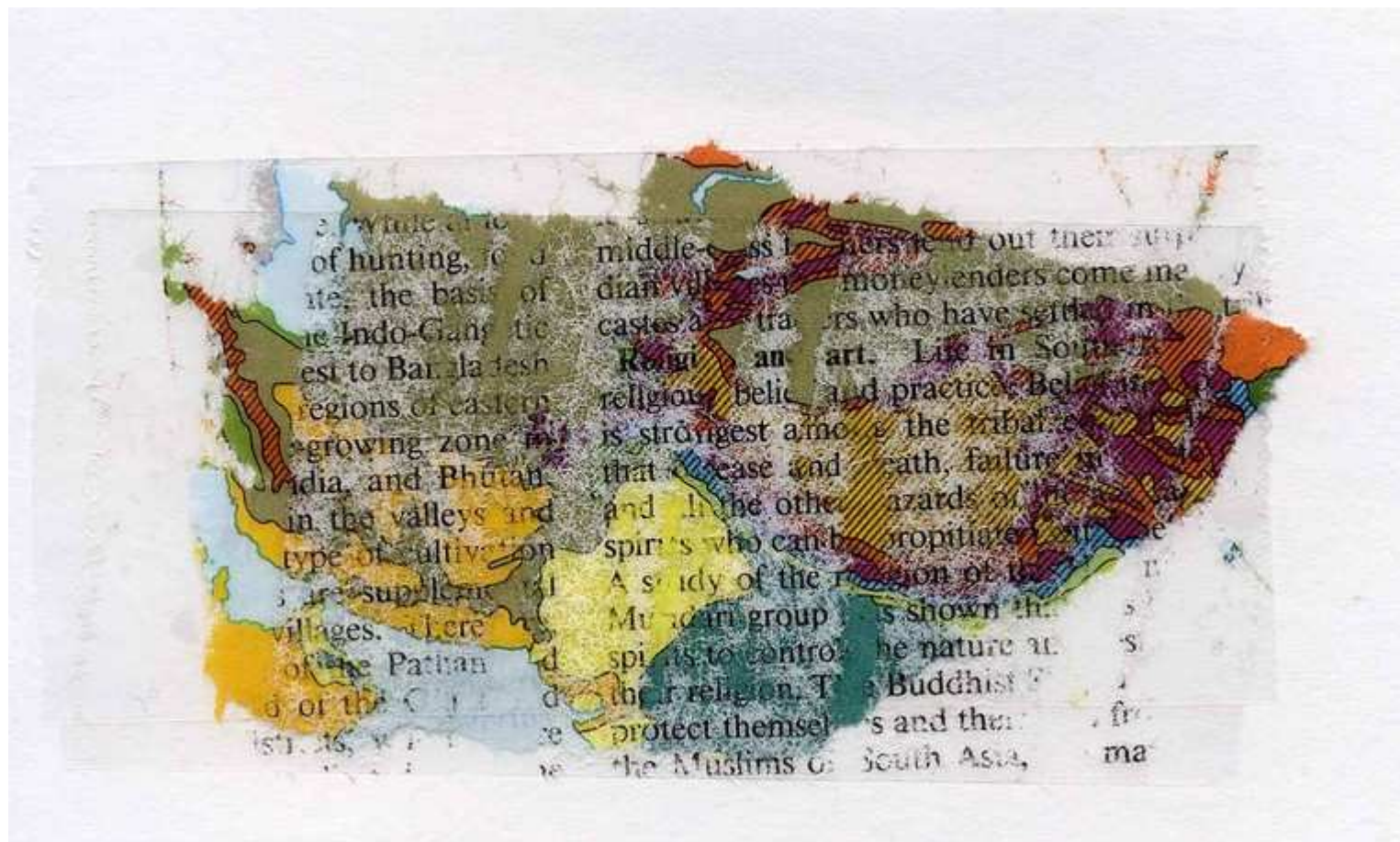
In some mollusks, however, the
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Charles Darwin to an influential essay by Herbert Spencer
M ... laughter and its role in discharging accumulated ner-
vous energy. No convincing proof for such theories has
ever been presented.

There is now direct evidence that threshold (the amount
of stimulus required to elicit the response) for attack or
threat may be raised or lowered over periods as long as
KATHM ... In the ... following the evocation of
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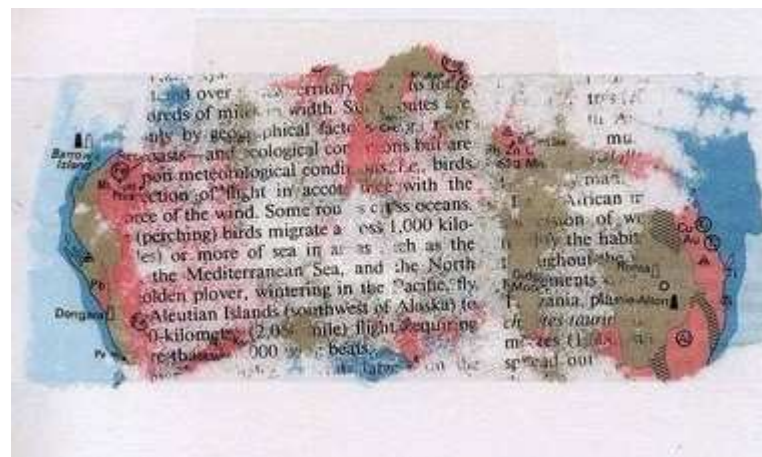


migration can be considered as migration.
 have in location not necessarily follow
 vision or intuition, both of which are
 and subsequent disappearance.
 at irregular times and locations.
 leads to the distribu-
 tion of a species particularly in the
 The migration cycle is often an annual cycle, thus closely
 linked with the cyclic pattern of the seasons. The migra-
 tion of most birds and mammals is seasonal. Some fishes
 are on a yearly cycle. In many cases (e.g., salmon and
 eels) animals with a relatively long life-span return to the
 place of birth in order to reproduce and eventually die.
 In other cases, as in certain invertebrates, the migration
 is a seasonal phenomenon.

types of uranium (uranium-235, one of the (thorium-232) and other lived radioactive isotopes. It is quite unlikely that long-lived thorium-232 and related isotopes are found in nature. Finally, there are the nuclides that are continuously produced by cosmic rays or the reactions of other elements. These include the minute amounts of carbon-14 that are present in the atmosphere and in the water such that 14 disintegrates per gram of carbon per year.

Many of the radioactive isotopes of the elements are artificially induced nuclear reactions. The list of these isotopes (Z=43) and the list of the isotopes with atomic number (Z=81) have no stable isotopes.





BEHAVIOUR IN HYBRIDS

Two closely related species of small Agapornis parrots, the peach-faced lovebird (*Agapornis roseicollis*) and Fischer's lovebird (*A. personata fischeri*), have completely different methods of carrying nesting material by the beak. The peach-faced lovebird rucks each strip under the feathers of the lower back. When about six strips have been collected, the bird flies to the nest and places the strips in her nest. Fischer's lovebird carries each strip one at a time into the nest, where it is placed between the strips already there. Initially, the strips are placed into their cup.

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The state of the various arts. Austrian expressionism

literature has gained world renown through the vision

novelist Franz Kafka, a native of Prague who died in

Vienna in 1924. As part of a general Kafka revival

of his haunting novels, *Der Prozess* (*The Trial*)

into an opera by Austria's best known

poser, Gottfried von Einem.

Georg Trakl, a promising Expressionist poet

World War I; Franz Werfel, an Expressionist

playwright; Karl Kraus, a satirist; and

Robert Musil, who wrote the

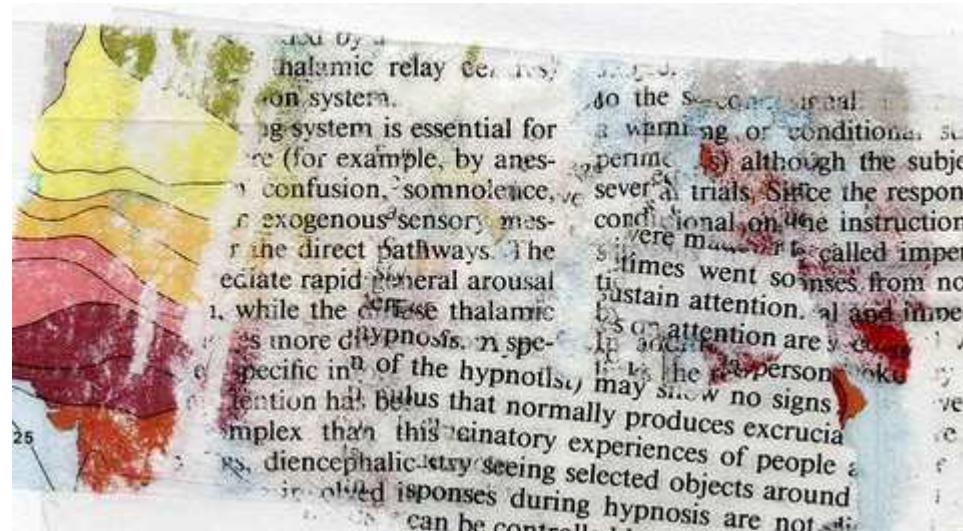
novel *The Man Without Qualities*, which

has been a considerable influence on modern

literature in Austria.

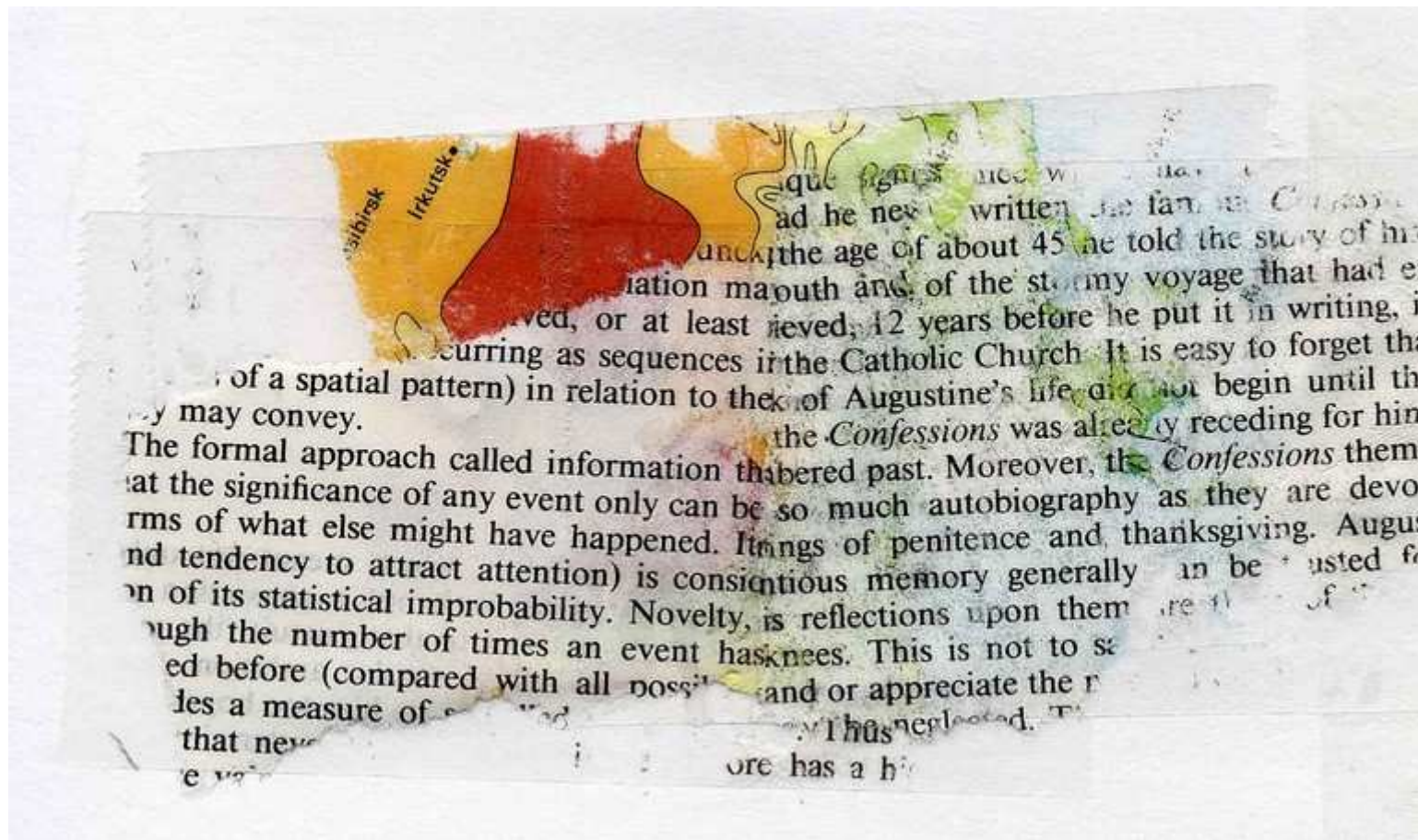




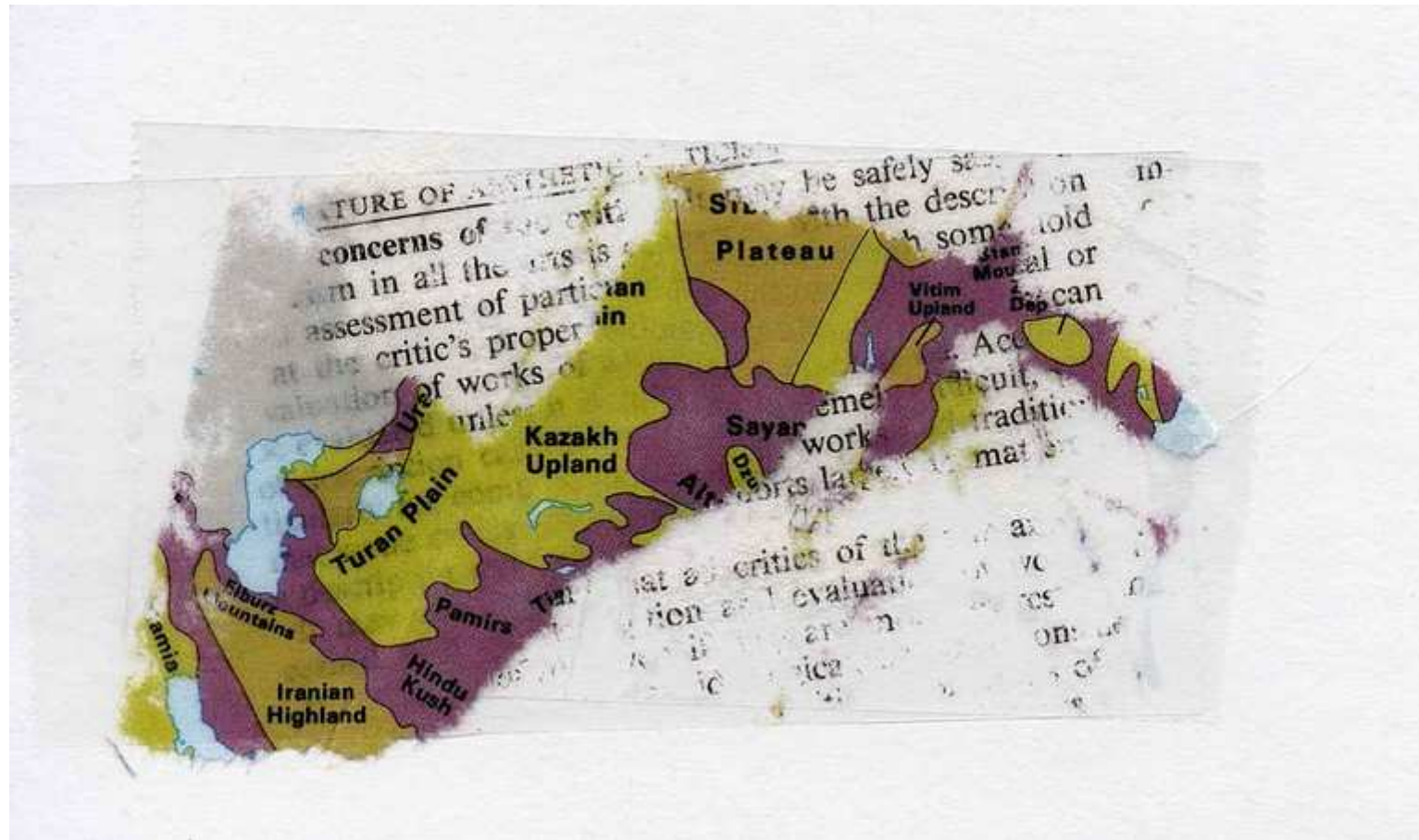


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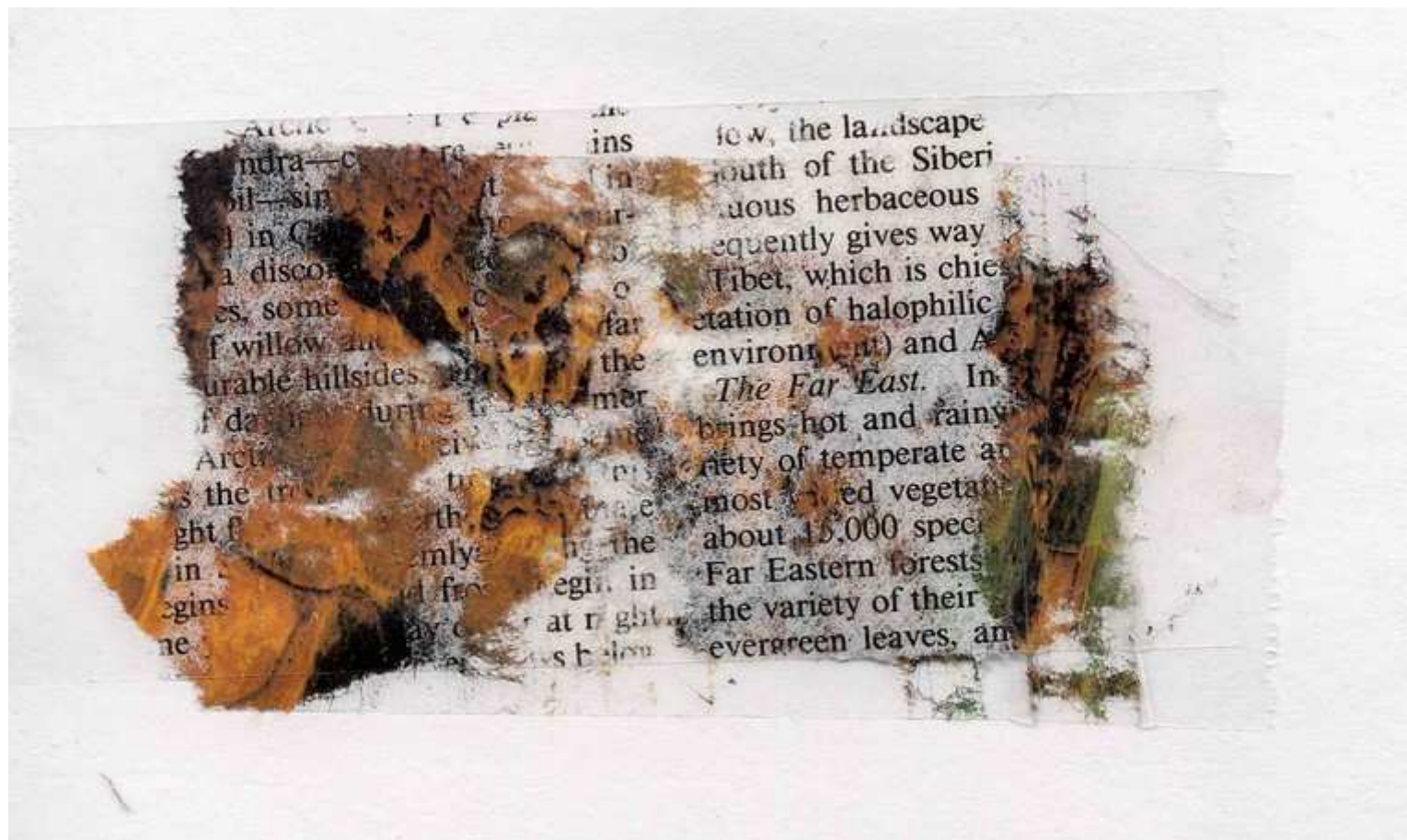


criticism of the Arts

Criticism of literature, of music, of the visual arts, or of any other of the arts can be a controversial one. For one thing, disputes arise about the end, purpose, and nature of the judgments made by critics. At other times, critics disagree about the nature and purpose of the works of art themselves. What is not disputed is that each of these matters is of great importance to the arts, and that critics are concerned with them. In fact, the very word "criticism" implies a judgment about the merits or demerits of a work of art.

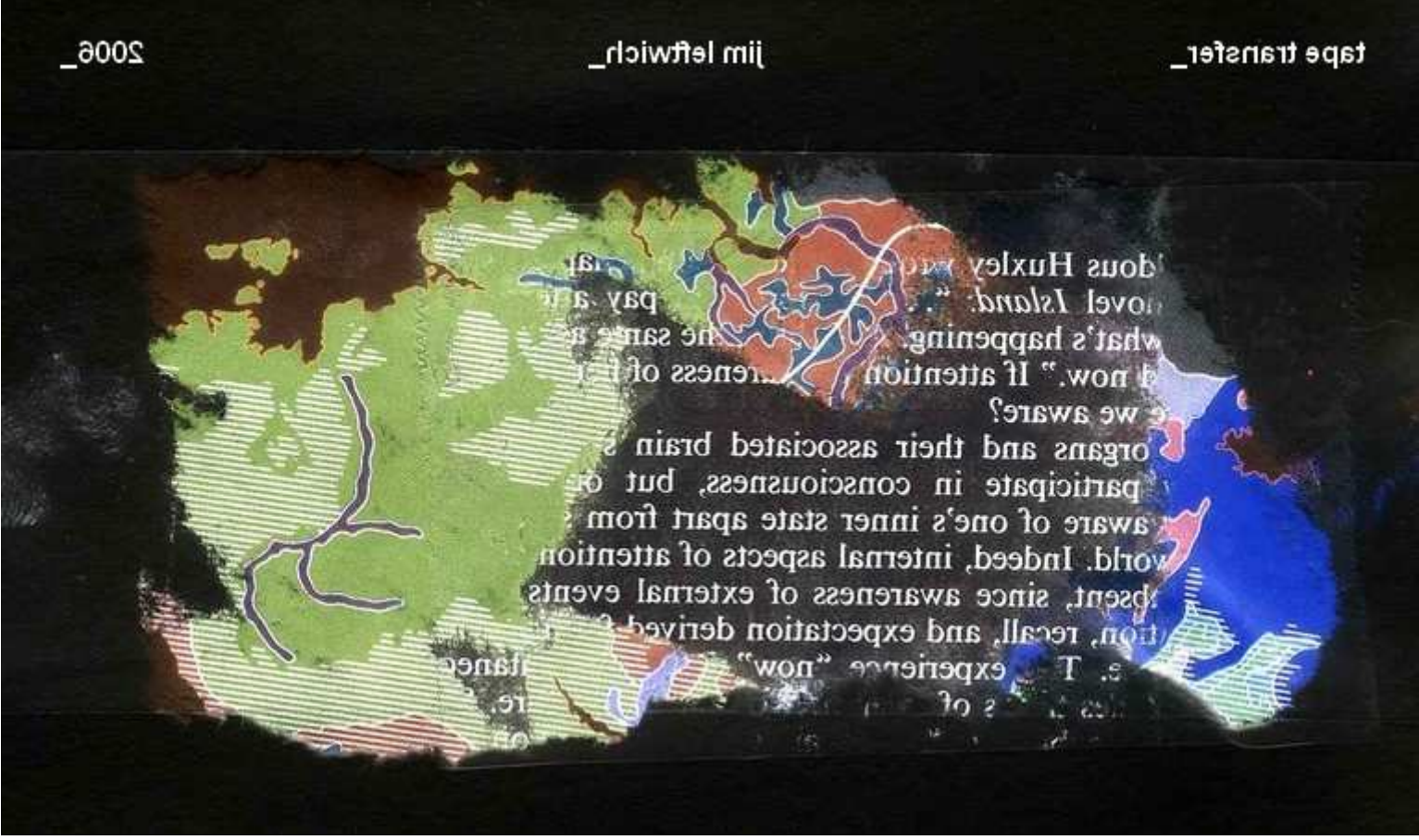
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